

# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 125949**

**TO: Shailendra Kumar**  
**Location: 5d61 / 5c18**  
**Wednesday, June 30, 2004**  
**Art Unit: 1621**  
**Phone: 272-0640**  
**Serial Number: 10 / 757231**

**From: Jan Delaval**  
**Location: Biotech-Chem Library**  
**Rem 1A51**  
**Phone: 272-2504**

**jan.delaval@uspto.gov**

### **Search Notes**

May please

125949

Access DB# \_\_\_\_\_

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: S. Kumar Examiner #: 695-94 Date: 6/29/94  
Art Unit: 1621 Phone Number 301-722-0660 Serial Number: 15/757231  
Mail Box and Bldg/Room Location: REM 506 Results Format Preferred (circle): PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**

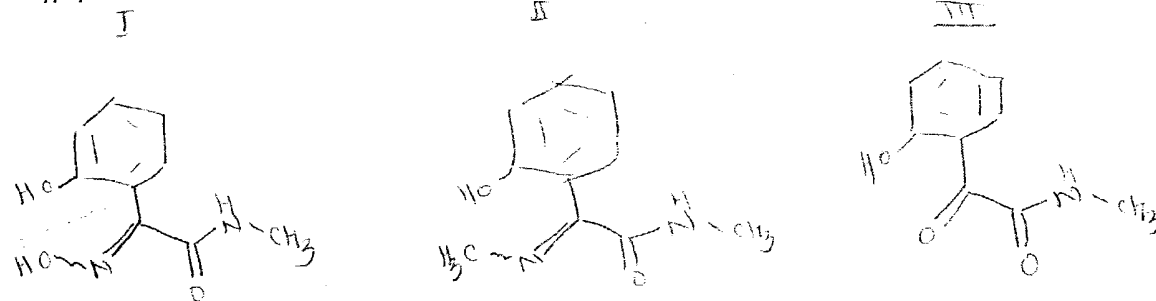
\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods for producing 2-(2-hydroxyphenyl)-2-(L-arginine)-N...  
Inventors (please provide full names): Walter Hubsch et al

Earliest Priority Filing Date: 11/26/1999

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*



please see ~~claims~~ claims 2, 3, 4, 5, 6, 7

\*\*\*\*\*  
**STAFF USE ONLY**

	Type of Search	Vendors and cost where applicable
Searcher: <u>6/29/94</u>	NA Sequence (#) _____	STN <u>✓</u>
Searcher Phone #: <u>22504</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>✓</u>	Questel/Orbit <u>6/29/94</u>
Date Searcher Picked Up: <u>6/30</u>	Bibliographic _____	Dr.Link _____
Date Completed: <u>6/30</u>	Litigation _____	Lexis/Nexis <u>6/29/94</u>
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems <u>6/29/94</u>
Clerical Prep Time: <u>15</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>4:30</u>	Other _____	Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 06:22:04 ON 30 JUN 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 JUN 2004 HIGHEST RN 700803-86-7

DICTIONARY FILE UPDATES: 28 JUN 2004 HIGHEST RN 700803-86-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

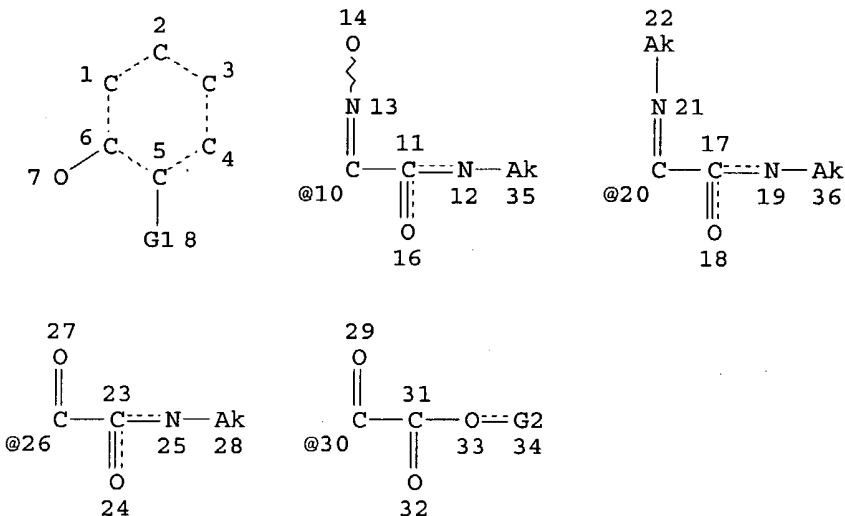
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta que l36

L30 STR



VAR G1=10/20/26/30

VAR G2=AK/CY

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

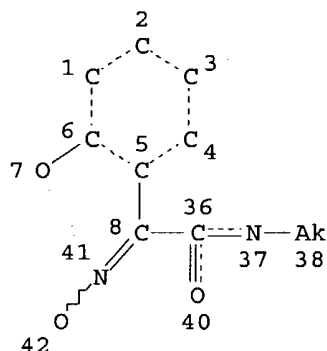
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

L32 824 SEA FILE=REGISTRY SSS FUL L30

L33 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC 5  
 NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE  
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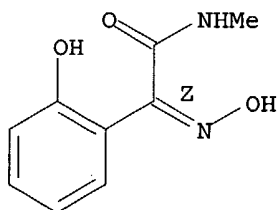
100.0% PROCESSED 622 ITERATIONS  
 SEARCH TIME: 00.00.01

3 ANSWERS

=> d ide can tot l36

L36 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 497869-09-7 REGISTRY  
 CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(hydroxyimino)-N-methyl-, ( $\alpha$ Z)-  
 (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C9 H10 N2 O3  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT  
 DT.CA Caplus document type: Patent  
 RL.P Roles from patents: PREP (Preparation)

Double bond geometry as shown.



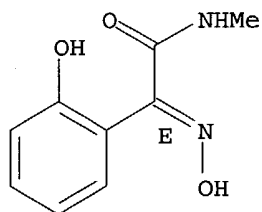
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:169968

L36 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 496770-93-5 REGISTRY  
CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(hydroxyimino)-N-methyl-, ( $\alpha$ E)-  
(9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C9 H10 N2 O3  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Double bond geometry as shown.

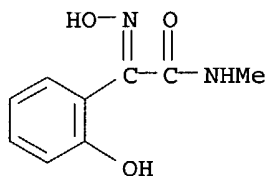


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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:153328

L36 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 342632-43-3 REGISTRY  
CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(hydroxyimino)-N-methyl- (9CI) (CA  
INDEX NAME)  
FS 3D CONCORD  
MF C9 H10 N2 O3  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

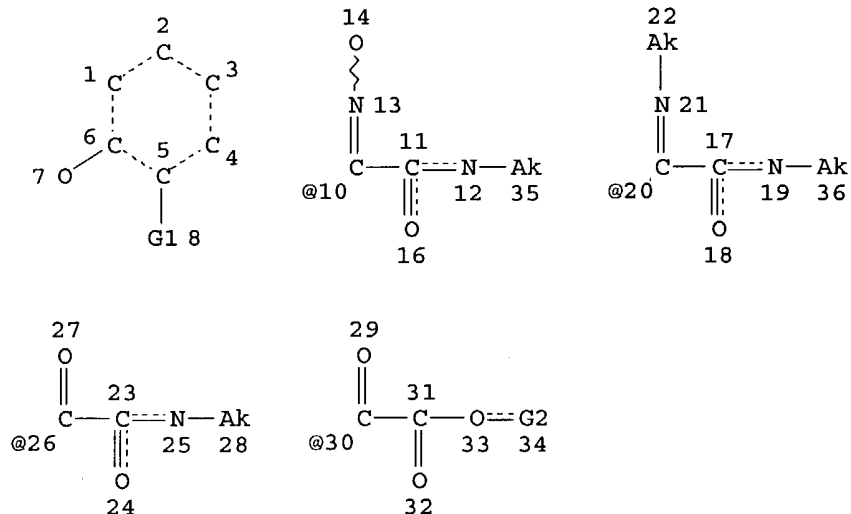
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:19440

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L30

STR



VAR G1=10/20/26/30

VAR G2=AK/CY

NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

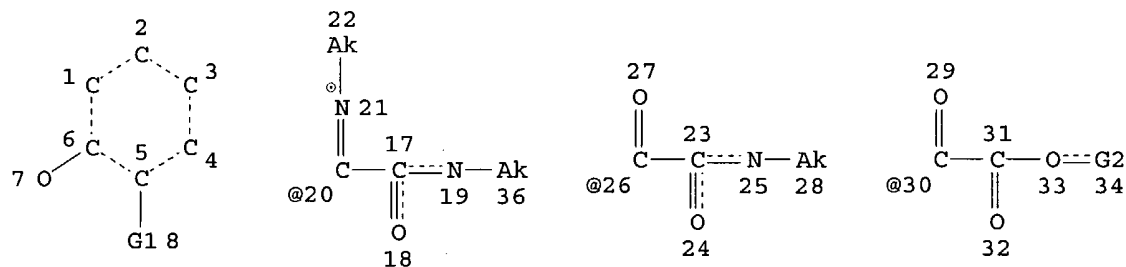
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

L32 824 SEA FILE=REGISTRY SSS FUL L30

L37 STR



Cy @38

VAR G1=20/26/30

VAR G2=AK/38

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 38

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 1

NUMBER OF NODES IS 28

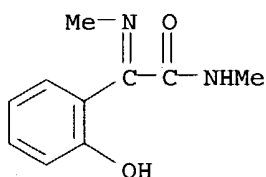
STEREO ATTRIBUTES: NONE

L39 5 SEA FILE=REGISTRY SUB=L32 CSS FUL L37

L40 4 SEA FILE=REGISTRY ABB=ON PLU=ON L39 NOT CCS/CI

=> d ide can tot 140

L40 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 342632-46-6 REGISTRY  
CN Benzeneacetamide, 2-hydroxy-N-methyl- $\alpha$ -(methylimino)- (9CI) (CA  
INDEX NAME)  
FS 3D CONCORD  
MF C10 H12 N2 O2  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



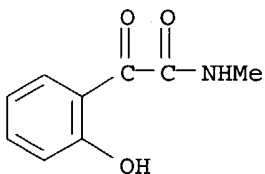
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2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:169968

REFERENCE 2: 135:19440

L40 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 342632-41-1 REGISTRY  
CN Benzeneacetamide, 2-hydroxy-N-methyl- $\alpha$ -oxo- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C9 H9 N O3  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



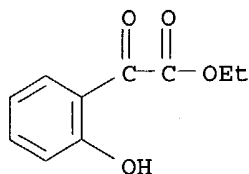
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:19440

L40 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN

RN 40785-55-5 REGISTRY  
CN Benzeneacetic acid, 2-hydroxy- $\alpha$ -oxo-, ethyl ester (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Ethyl (2-hydroxyphenyl)glyoxylate  
CN Ethyl 2-hydroxybenzoylformate  
FS 3D CONCORD  
MF C10 H10 O4  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)  
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

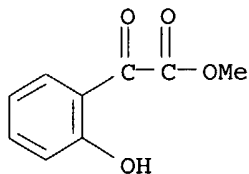
9 REFERENCES IN FILE CA (1907 TO DATE)  
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:326021  
REFERENCE 2: 134:326020  
REFERENCE 3: 127:81288  
REFERENCE 4: 124:8508  
REFERENCE 5: 110:111727  
REFERENCE 6: 107:197805  
REFERENCE 7: 92:41857  
REFERENCE 8: 87:184461  
REFERENCE 9: 78:124421

L40 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 34073-46-6 REGISTRY  
CN Benzeneacetic acid, 2-hydroxy- $\alpha$ -oxo-, methyl ester (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glyoxylic acid, (o-hydroxyphenyl)-, methyl ester (8CI)  
OTHER NAMES:  
CN 2-Hydroxy- $\alpha$ -oxobenzeneacetic acid methyl ester  
CN Methyl (2-hydroxyphenyl)glyoxylate  
FS 3D CONCORD  
MF C9 H8 O4  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, SPECINFO, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13 REFERENCES IN FILE CA (1907 TO DATE)

13 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:16442  
 REFERENCE 2: 138:368896  
 REFERENCE 3: 137:392532  
 REFERENCE 4: 136:5997  
 REFERENCE 5: 135:19440  
 REFERENCE 6: 134:17495  
 REFERENCE 7: 134:4766  
 REFERENCE 8: 123:142968  
 REFERENCE 9: 115:71330  
 REFERENCE 10: 110:111727

=> d his

(FILE 'CASREACT' ENTERED AT 06:00:31 ON 30 JUN 2004)  
 DEL HIS

FILE 'HCAPLUS' ENTERED AT 06:00:57 ON 30 JUN 2004

L1 1 S US6700017/PN OR (WO2000-EP11225 OR DE99-19956920)/AP,PRN  
 E HUEBSCH W/AU  
 L2 94 S E3-E6  
 E HUBSCH W/AU  
 L3 4 S E4  
 E GALLenkAMP B/AU  
 L4 73 S E3,E4  
 E GAYER H/AU  
 L5 97 S E3-6  
 E MULDER L/AU  
 L6 28 S E3-E9,E17-E19  
 E MUELDER/AU  
 E MUH T/AU  
 L7 1 S E3  
 E MUEH T/AU  
 L8 10 S E4  
 E LANTZSCH R/AU  
 L9 184 S E3,E4

L10           20 S E4  
              E WEINTRIT H/AU  
              E WEINTRIT H/AU  
              E BAYER/PA,CS  
L11       47089 S BAYER?/PA,CS  
              SEL RN L1

FILE 'REGISTRY' ENTERED AT 06:03:54 ON 30 JUN 2004

L12           6 S E1-E6  
L13           1 S L12 AND C8H4O3  
L14           1 S L12 AND C9H10N2O3  
L15           1 S L12 AND C9H9NO3  
L16           1 S L12 AND C10H12N2O2  
L17           1 S L12 AND C9H8O4  
L18           1 S L12 NOT L13-L17

FILE 'HCAOLD' ENTERED AT 06:06:40 ON 30 JUN 2004

L19           0 S L14 OR L15 OR L16 OR L17

FILE 'HCAPLUS' ENTERED AT 06:07:27 ON 30 JUN 2004

L20           1 S L14  
L21           1 S L15  
L22           2 S L16  
L23           2 S L20-L22  
L24           13 S L17  
L25           4 S L18  
L26           51 S L13  
L27           1 S L23 AND L24-L26  
L28           1 S L23 NOT L27  
L29           2 S L1-L11 AND L20-L23,L27,L28

FILE 'REGISTRY' ENTERED AT 06:08:59 ON 30 JUN 2004

L30           STR  
L31           50 S L30  
L32           824 S L30 FUL  
              SAV TEMP L32 KUMAR757/A  
L33           STR L30  
L34           43 S L33 SAM SUB=L32  
L35           1 S L33 CSS SAM SUB=L32  
L36           3 S L33 CSS FUL SUB=L32  
              SAV L36 KUMAR757A/A TEMP  
L37           STR L30  
L38           0 S L37 CSS SAM SUB=L32  
L39           5 S L37 CSS FUL SUB=L32  
              SAV TEMP L39 KUMAR757B/A  
L40           4 S L39 NOT CCS/CI

FILE 'HCAPLUS' ENTERED AT 06:18:07 ON 30 JUN 2004

L41           3 S L36  
L42           23 S L39  
L43           2 S L41 AND L42  
L44           3 S L29,L41,L43  
L45           3 S L44 AND L1-L11  
L46           3 S L45 AND (METHYLAMINE OR METHYL AMINE OR MENH2)

FILE 'REGISTRY' ENTERED AT 06:19:32 ON 30 JUN 2004

L47           1 S 74-89-5

FILE 'HCAPLUS' ENTERED AT 06:19:36 ON 30 JUN 2004

L48           2 S L47 AND L45  
L49           3 S L46,L48  
L50           0 S L49 AND (HYDROXYLAMINE OR HYDROXY# AMINE)  
L51           2 S L49 AND L42

L52 3 S L49,L51  
SEL RN

FILE 'REGISTRY' ENTERED AT 06:21:15 ON 30 JUN 2004  
L53 18 S E7-E24

FILE 'HCAPLUS' ENTERED AT 06:21:49 ON 30 JUN 2004  
L54 3 S L53 AND L52

FILE 'REGISTRY' ENTERED AT 06:22:04 ON 30 JUN 2004

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 06:22:43 ON 30 JUN 2004  
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FILE COVERS 1907 - 30 Jun 2004 VOL 141 ISS 1  
FILE LAST UPDATED: 29 Jun 2004 (20040629/ED)

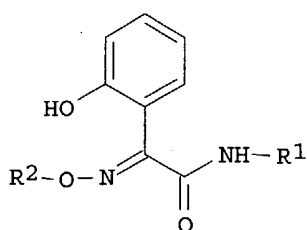
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l54 all hitstr tot

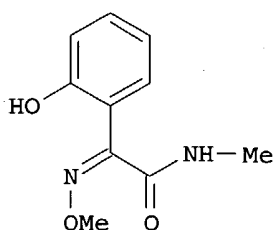
L54 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:133224 HCAPLUS  
DN 138:169968  
ED Entered STN: 21 Feb 2003  
TI Preparation of 2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides via the ring-opening amidation of 2,2-dichloro-3(2H)-benzofuranone  
IN Weintritt, Holger; Lantzsch, Reinhard; Mueh, Thorsten  
PA Bayer CropScience AG, Germany  
SO PCT Int. Appl., 28 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
IC ICM C07C249-08  
ICS C07C251-48; C07C249-04  
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
Section cross-reference(s): 21, 34  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003014066	A2	20030220	WO 2002-EP8244	20020724
	WO 2003014066	A3	20031127		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,			

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
 TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 DE 10138575 A1 20030220 DE 2001-10138575 20010806  
 EP 1417168 A2 20040512 EP 2002-758383 20020724  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
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 WO 2002-EP8244 W 20020724  
 OS CASREACT 138:169968; MARPAT 138:169968  
 GI



I



II

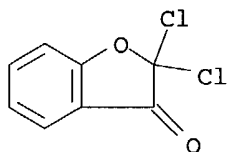
- AB A process for the preparation of title compds. I [R1, R2 = alkyl] via the ring-opening amidation of 2,2-dichloro-3(2H)-benzofuranone with amines and related compds. is disclosed. For example, to a solution of 2,2-dichloro-3(2H)-benzofuranone (5.39 gm) in tert-butylmethyl ether (60 mL) was added aqueous 40% **methylamine** (10.09 gm) over a 10 min period. The reaction was stirred for addnl. 3 h, then water (8.8 mL), methoxyamine hydrochloride (2.61 gm) and sodium acetate (2.56 gm) was added. The reaction was stirred for an addnl. 9 h, the reaction worked-up by vacuum distillation and recrystn. from ice water to afford (Z)-methylacetamide II in 91% yield. Approx., 3-specific examples of compds. I and one intermediate were prepared
- ST prepn ring opening regioselective methylacetamide dichlorobenzofuranone
- IT Amines, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (alkoxylated; preparation of hydroxyphenylalkoxyiminomethylacetamides via the ring-opening amidation of dichlorobenzofuranone)
- IT Amidation  
 (preparation of hydroxyphenylalkoxyiminomethylacetamides via the ring-opening amidation of dichlorobenzofuranone)
- IT Amines, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of hydroxyphenylalkoxyiminomethylacetamides via the ring-opening amidation of dichlorobenzofuranone)
- IT Ring opening  
 (regioselective; preparation of hydroxyphenylalkoxyiminomethylacetamides via the ring-opening amidation of dichlorobenzofuranone)
- IT **36037-84-0P**  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of hydroxyphenylalkoxyiminomethylacetamides via the ring-opening amidation of dichlorobenzofuranone)
- IT **74-89-5, Methylamine**, reactions 593-56-6,  
 Methoxyamine hydrochloride 7782-50-5, Chlorine, reactions  
 10039-54-0, Hydroxylammonium sulfate 93680-80-9,  
 3-Acetoxybenzofuran

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of hydroxyphenylalkoxyiminomethylacetamides via the  
 ring-opening amidation of dichlorobenzofuranone)

IT 308286-26-2P 342632-46-6P 497869-09-7P  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP  
 (Preparation)  
 (product; preparation of hydroxyphenylalkoxyiminomethylacetamides via the  
 ring-opening amidation of dichlorobenzofuranone)

IT 36037-84-0P  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic  
 preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of hydroxyphenylalkoxyiminomethylacetamides via  
 the ring-opening amidation of dichlorobenzofuranone)

RN 36037-84-0 HCAPLUS  
 CN 3(2H)-Benzofuranone, 2,2-dichloro- (9CI) (CA INDEX NAME)



IT 74-89-5, Methylamine, reactions 593-56-6,  
 Methoxyamine hydrochloride 7782-50-5, Chlorine, reactions  
 10039-54-0, Hydroxylammonium sulfate 93680-80-9,  
 3-Acetoxybenzofuran  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of hydroxyphenylalkoxyiminomethylacetamides via the  
 ring-opening amidation of dichlorobenzofuranone)

RN 74-89-5 HCAPLUS  
 CN Methanamine (9CI) (CA INDEX NAME)

H<sub>3</sub>C-NH<sub>2</sub>

RN 593-56-6 HCAPLUS  
 CN Hydroxylamine, O-methyl-, hydrochloride (8CI, 9CI) (CA INDEX NAME)

H<sub>3</sub>C-O-NH<sub>2</sub>

● HCl

RN 7782-50-5 HCAPLUS  
 CN Chlorine (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Cl-Cl

RN 10039-54-0 HCAPLUS  
 CN Hydroxylamine, sulfate (2:1) (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7803-49-8

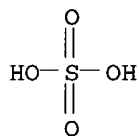
CMF H3 N O

H<sub>2</sub>N-OH

CM 2

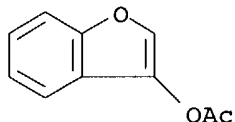
CRN 7664-93-9

CMF H2 O4 S



RN 93680-80-9 HCAPLUS

CN 3-Benzofuranol, acetate (9CI) (CA INDEX NAME)



IT 308286-26-2P 342632-46-6P 497869-09-7P

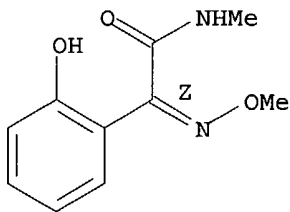
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(product; preparation of hydroxyphenylalkoxyiminomethylacetamides via the ring-opening amidation of dichlorobenzofuranone)

RN 308286-26-2 HCAPLUS

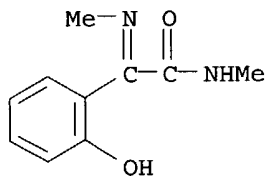
CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(methoxyimino)-N-methyl-, ( $\alpha$ Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 342632-46-6 HCAPLUS

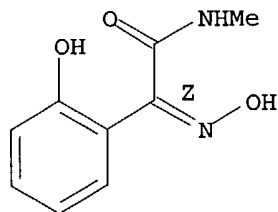
CN Benzeneacetamide, 2-hydroxy-N-methyl- $\alpha$ -(methoxyimino)- (9CI) (CA INDEX NAME)



RN 497869-09-7 HCAPLUS

CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(hydroxyimino)-N-methyl-, ( $\alpha$ Z)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L54 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:114205 HCAPLUS

DN 138:153328

ED Entered STN: 14 Feb 2003

TI Stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with methylamine

IN Weintritt, Holger; Lantzs, Reinhard; Mueh, Thorsten

PA Bayer CropScience AG, Germany

SO Ger. Offen., 6 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C07C249-12

ICS C07C251-38

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10137728	A1	20030213	DE 2001-10137728	20010801
	WO 2003014065	A1	20030220	WO 2002-EP8040	20020719
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1414789	A1	20040506	EP 2002-751149	20020719
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	DE 2001-10137728	A	20010801		

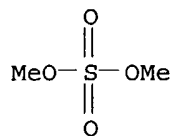
WO 2002-EP8040 W 20020719  
OS CASREACT 138:153328; MARPAT 138:153328  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

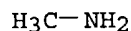
- AB The invention concerns a new procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides [I; R = (un)substituted C1-6 alkyl with 1-3 F atoms; e.g., (2E)-2-(hydroxyphenyl)-2-(methoxyimino)-N-methylacetamide] are prepared in high yield by the stereoselective ring-opening amidation of 2-benzofuranone-3-oxime (III) with **methylamine** to give (2E)-2-(hydroxyphenyl)-2-(hydroxyimino)-N-methylacetamide (II) which is then etherified with alkyl derivs. RX (X = Cl, Br, I, etc.; di-Me sulfate).
- ST hydroxyphenylmethoxyiminomethylacetamide stereoselective prepn;  
hydroxyphenylalkoxyiminomethylacetamide stereoselective prepn
- IT Etherification  
(of (2E)-2-(hydroxyphenyl)-2-(hydroxyimino)-N-methylacetamide with alkyl derivs.)
- IT Stereochemistry  
(stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)
- IT Amides, preparation  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)
- IT Ring opening  
(stereoselective; of 3-oximino-2-benzofuranone with **methylamine** into (2E)-2-(hydroxyphenyl)-2-(hydroxyimino)-N-methylacetamide)
- IT 77-78-1, Dimethyl sulfate  
RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or reagent)  
(in a stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)
- IT 74-89-5, **Methylamine**, reactions 17892-65-8,  
3-(Hydroxyimino)-2-benzofuranone  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)
- IT 496770-93-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)
- IT 156895-31-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)
- IT 77-78-1, Dimethyl sulfate  
RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or reagent)  
(in a stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)



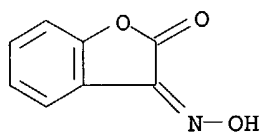
RN 77-78-1 HCAPLUS  
 CN Sulfuric acid, dimethyl ester (8CI, 9CI) (CA INDEX NAME)



IT 74-89-5, **Methylamine**, reactions 17892-65-8,  
 3-(Hydroxyimino)-2-benzofuranone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)  
 RN 74-89-5 HCAPLUS  
 CN Methanamine (9CI) (CA INDEX NAME)

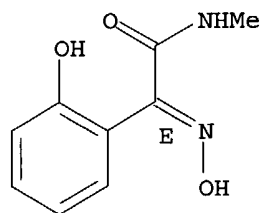


RN 17892-65-8 HCAPLUS  
 CN 2,3-Benzofurandione, 3-oxime (8CI, 9CI) (CA INDEX NAME)



IT 496770-93-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)  
 RN 496770-93-5 HCAPLUS  
 CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(hydroxyimino)-N-methyl-, ( $\alpha$ E)- (9CI) (CA INDEX NAME)

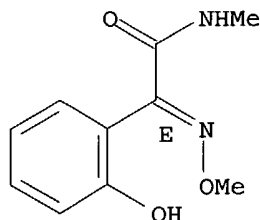
Double bond geometry as shown.



IT 156895-31-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (stereoselective procedure for the production of (2E)-2-(hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamides by the stereoselective ring-opening amidation of 3-oximino-2-benzofuranone with **methylamine**)  
 RN 156895-31-7 HCAPLUS

CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(methoxyimino)-N-methyl-, ( $\alpha$ E)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L54 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:396834 HCAPLUS  
DN 135:19440  
ED Entered STN: 01 Jun 2001  
TI Methods for producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivatives  
IN Huebsch, Walter; Gallenkamp, Bernd; Gayer, Herbert; Mulder, Lubbertus; Mueh, Thorsten; Lantzsch, Reinhard; Weintritt, Holger  
PA Bayer Aktiengesellschaft, Germany  
SO PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
IC ICM C07C251-00  
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001038294	A2	20010531	WO 2000-EP11225	20001114 <--
WO 2001038294	A3	20011018		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19956920	A1	20010531	DE 1999-19956920	19991126 <--
BR 2000015813	A	20020716	BR 2000-15813	20001114 <--
EP 1235790	A2	20020904	EP 2000-981255	20001114 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003514890	T2	20030422	JP 2001-539851	20001114 <--
ZA 2002003079	A	20030422	ZA 2002-3079	20020418 <--
US 6700017	B1	20040302	US 2002-130810	20020520 <--
PRAI DE 1999-19956920	A	19991126 <--		
WO 2000-EP11225	W	20001114 <--		

OS MARPAT 135:19440

AB The invention relates to several novel methods for producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivs. Thus, 2-HOC6H4COCO2Me was treated with MeNH2 in dioxane to give 2-HOC6H4C(:NMe)CONHMe which was treated with MeONH2 in MeOH to give 2-HOC6H4C(:NOMe)CONHMe. 2-HOC6H4COCO2Me was also converted to 2-HOC6H4COCONHMe for oximation.

ST hydroxyphenylalkoxyiminoacetamide prepn; alkoxyiminohydroxyphenylacetamide prepn

IT 4732-72-3, 2,3-Benzofurandione 34073-46-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivs.)

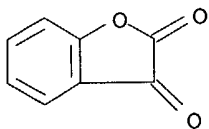
IT 342632-41-1P 342632-43-3P 342632-46-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivs.)

IT 207515-53-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivs.)

IT 4732-72-3, 2,3-Benzofurandione 34073-46-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivs.)

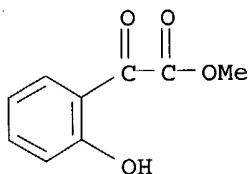
RN 4732-72-3 HCAPLUS

CN 2,3-Benzofurandione (8CI, 9CI) (CA INDEX NAME)



RN 34073-46-6 HCAPLUS

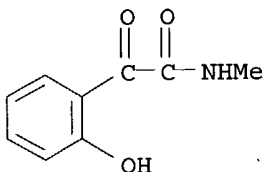
CN Benzeneacetic acid, 2-hydroxy- $\alpha$ -oxo-, methyl ester (9CI) (CA INDEX NAME)



IT 342632-41-1P 342632-43-3P 342632-46-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide derivs.)

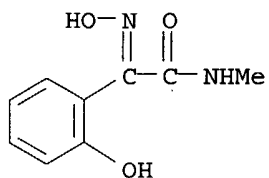
RN 342632-41-1 HCAPLUS

CN Benzeneacetamide, 2-hydroxy-N-methyl- $\alpha$ -oxo- (9CI) (CA INDEX NAME)



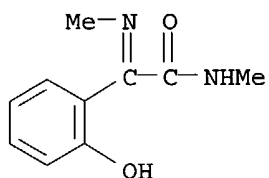
RN 342632-43-3 HCAPLUS

CN Benzeneacetamide, 2-hydroxy- $\alpha$ -(hydroxyimino)-N-methyl- (9CI) (CA INDEX NAME)



RN 342632-46-6 HCAPLUS

CN Benzeneacetamide, 2-hydroxy-N-methyl-α-(methylimino)- (9CI) (CA INDEX NAME)

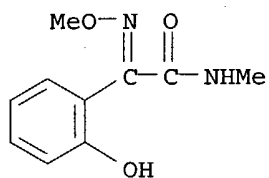


IT 207515-53-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(producing 2-(2-hydroxyphenyl)-2-(alkoxyimino)-N-methylacetamide  
derivs.)

RN 207515-53-5 HCAPLUS

CN Benzeneacetamide, 2-hydroxy-α-(methoxyimino)-N-methyl- (9CI) (CA INDEX NAME)



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